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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,923	04/26/2001	Erin H. Sibley	PD-201008A	2070
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/844,923

Applicant(s)

SIBLEY, ERIN H.

Examiner

JOSEPH G. USTARIS

Art Unit

2424

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 13-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 18-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/C)
- Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-12, 18, and 19 have been considered but are moot in view of the new ground(s) of rejection.

Furthermore, applicant argues that Hendricks does not disclose an allocated bandwidth having excess bandwidth. However, reading the claims in the broadest sense, Hendricks does disclose that limitation in the claims. Hendricks discloses allocating a frequency spectrum of a communication media (See Fig. 3, 216; col. 10 lines 28-51). Hendricks generates a first portion (See Fig. 3, 216, other digital) of the allocated frequency spectrum so that the first portion is less than the total bandwidth (See Fig. 3, 216, other digital; the other digital portion is less than the combined analog signals, digital compressed signals, other digital, and up-stream) to form an excess bandwidth portion (See Fig. 3, 216; any bandwidth outside of the other digital portion is considered excess bandwidth because it is not being used by the other digital portion). Also, Eldering discloses allocating a frequency spectrum for a digital television channel having a total bandwidth (See Fig. 1; col. 3 lines 6-24). Eldering also discloses generating an over-the-air digital television channel signal over a first portion (See Fig. 1, program 1) of the allocated frequency spectrum so that the first portion is less than the total bandwidth (See Fig. 1, program 1 bandwidth is less than the total bandwidth of the channel) to form an excess bandwidth portion (See Fig. 1, any bandwidth outside of the program 1 bandwidth is considered excess bandwidth because it is not being used by program 1) and inserting digital over-the-air electronic content (See Fig. 1, programs

2-7) into the excess bandwidth portion (See Fig. 1; the bandwidth outside of program 1 bandwidth).

Applicant is reminded that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-7, 9-12, and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (US006160989A) in view of Eldering et al. (US006704930B1) and Breslauer et al. (US006637027B1).

Regarding claim 1, Hendricks et al. (Hendricks) discloses a system of broadcasting (See Fig. 1) comprising:

a satellite (See Figs. 1 and 3, satellite);

a network operations center (operations center 202) uplinking electronic content (program signals) to said satellite (See Figs. 1 and 3; col. 5 lines 6-16 and col. 10 lines 1-51);

a terrestrial over-the-air digital broadcast center receiving said electronic content from said satellite (See Figs. 1 and 3, headend 208; col. 7 lines 11-34), generating an

over-the-air digital television channel signal over a first portion (See Fig. 3, 216, other digital; col. 7 lines 29-34, Hendricks discloses the use of cellular networks for a delivery system wherein cellular networks wirelessly transmit television services/content via radio transmissions through the air or "over-the-air") of an allocated frequency spectrum (See Fig. 3, 216; col. 10 lines 28-51, the allocated frequency spectrum total bandwidth includes analog signals, digital compressed signals, other digital, and up-stream) so that the first portion is less than the total bandwidth (See Fig. 3, 216, other digital; the other digital portion is less than the combined analog signals, digital compressed signals, other digital, and up-stream) to form an excess bandwidth portion (See Fig. 3, 216; any bandwidth outside of the other digital portion is considered excess bandwidth because it is not being used by the other digital portion) and inserting digital over-the-air electronic content (See Fig. 3, 216, digital compressed signals; col. 7 lines 29-34) corresponding to the electronic content (program signals) into the excess bandwidth portion (See Fig. 3, 216; the bandwidth outside of the other digital portion); and

a user appliance receiving said electronic content (See Fig. 1, 220).

However, Hendricks does not explicitly disclose allocating a frequency spectrum for a digital television channel having a total bandwidth and that the user appliance uses conditional access software.

As discussed above, Hendricks discloses allocating a frequency spectrum for the whole communication media. Eldering et al. (Eldering) discloses a digital television system. Eldering discloses allocating a frequency spectrum for a digital television channel having a total bandwidth (See Fig. 1; col. 3 lines 6-24). Eldering also discloses

generating an over-the-air digital television channel signal over a first portion (See Fig. 1, program 1) of the allocated frequency spectrum so that the first portion is less than the total bandwidth (See Fig. 1, program 1 bandwidth is less than the total bandwidth of the channel) to form an excess bandwidth portion (See Fig. 1, any bandwidth outside of the program 1 bandwidth is considered excess bandwidth because it is not being used by program 1) and inserting digital over-the-air electronic content (See Fig. 1, programs 2-7) into the excess bandwidth portion (See Fig. 1; the bandwidth outside of program 1 bandwidth). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system disclosed by Hendricks to allocate a frequency spectrum for a digital television channel having a total bandwidth and generate an over-the-air digital television channel signal over a first portion of the allocated frequency spectrum so that the first portion is less than the total bandwidth to form an excess bandwidth portion and inserting digital over-the-air electronic content into the excess bandwidth portion of the channel, as taught by Eldering, in order to provide a system that efficiently utilizes the bandwidth available in a digital channel between the headend and the user's equipment (See Hendricks col. 3 lines 20-22 and Eldering col. 1 lines 46-49).

Breslauer et al. (Breslauer) discloses a system that controls access to broadcast services. Breslauer discloses that a user appliance uses conditional access software (See Fig. 3, conditional access manager 314; col. 7 lines 26-27); the conditional access software allows the user appliance to access the content (See col. 8 line 42 – col. 9 line 12). Therefore, it would have been obvious to one of ordinary skill in the art at the time

the invention was made to modify the user appliance disclosed by Hendricks to use conditional access software, as taught by Breslauer, in order provide a system that ensures that the user has permission (e.g. meets certain conditions) to view the content (See col. 1 lines 53-59).

Regarding claim 2, as disclosed in claim 1 rejection, Hendricks discloses a satellite (stratospheric platform) communicates (coupled) with the cable headend (over the air broadcast center).

Regarding claim 3, Hendricks discloses that one of the transmission media can be a cellular network (See column 7 lines 29-34), which inherently includes a "cell tower".

Regarding claim 4, Hendricks discloses different types of transmission media (e.g. cellular networks) to the home and suggests that similar technology can be used interchangeably (column 7, lines 29-34). However, Hendricks does not explicitly disclose a TV broadcast tower.

Official Notice is taken that it is well known in the art that TV broadcast towers are used as a transmission scheme. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the system disclosed by Hendricks in view of Eldering to include a TV broadcast tower in order to provide more versatility, options of transmission, and robustness of transmission in case of malfunction by one scheme.

Regarding claims 5 and 6, Hendricks discloses both digital audio and video (See column 5 lines 6-16).

Regarding claim 7, the set top terminals or "user appliance" is "fixed" (See Hendricks Fig. 1).

Claim 9 contains the limitations of claim 1 (wherein the system performs the method) and is analyzed as previously discussed with respect to that claim.

Claim 10 contains the limitations of claims 2 and 9 and is analyzed as previously discussed with respect to those claims.

Claim 11 contains the limitations of claims 3 and 9 and is analyzed as previously discussed with respect to those claims.

Claim 12 contains the limitations of claims 4 and 9 and is analyzed as previously discussed with respect to those claims.

Regarding claim 18, the user appliance receives the electronic content (program signals) without receiving the digital channel signal (See Hendricks Fig. 3, 216, other digital) (See Hendricks col. 12 lines 44-57; Hendricks discloses that the set top terminal can only demultiplex, extract, and decompress a single channel at a time. Therefore, if the set top terminal is tuned to a program signal (digital compressed signals), then the set top terminal does not receive the digital channel signal (other digital)).

Claim 19 contains the limitations of claims 18 and 9 and is analyzed as previously discussed with respect to those claims.

Regarding claim 20, wherein the user appliance disregards the digital television channel (See Hendricks Fig. 3, 216, other digital) (See Hendricks col. 12 lines 44-57; Hendricks discloses that the set top terminal can only demultiplex, extract, and decompress a single channel at a time. Therefore, if the set top terminal is tuned to a

program signal (digital compressed signals), then the set top terminal disregards the digital television channel signal (other digital)).

Claim 21 contains the limitations of claims 9 and 20 and is analyzed as previously discussed with respect to those claims.

4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (US006160989A) in view of Eldering et al. (US006704930B1) and Breslauer et al. (US006637027B1) as applied to claim 1 above, and further in view of Owa et al. (US006711379B1).

Hendricks in view of Eldering and Breslauer does not disclose that the "user appliance is mobile".

Owa et al. (Owa) discloses a digital broadcasting system and terminal. Owa discloses mobile receiving terminals that can receive broadcasts from various sources (See Figs. 1, 23, and 24; col. 7 lines 21-35). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the system disclosed by Hendricks in view of Eldering and Breslauer to include mobile receiving terminals or "mobile user appliance", as taught by Owa, in order to expand the capabilities of the system thereby making the system more convenient for the user by enabling the user to roam freely with the mobile terminal (See col. 1 lines 26-45).

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSEPH G. USTARIS whose telephone number is (571)272-7383. The examiner can normally be reached on M-F 7:30-5 PM; Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher S. Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph G Ustaris/
Primary Examiner, Art Unit 2424